

METHOD AND DEVICE FOR TRANSDERMAL
ELECTROTRANSPORT DELIVERY OF FENTANYL
AND SUFENTANIL

ABSTRACT OF THE DISCLOSURE

5 The invention provides an improved electrotransport drug delivery system for analgesic drugs, namely fentanyl and sufentanil. The fentanyl/sufentanil is provided as a water soluble salt (eg, fentanyl hydrochloride) dispersed in a hydrogel formulation for use in an electrotransport device (10). In accordance with one aspect of the invention, 10 the concentration of fentanyl/sufentanil in the donor reservoir (26) solution is above a predetermined minimum concentration, whereby the transdermal electrotransport flux of fentanyl/sufentanil is maintained independent of the concentration of fentanyl/sufentanil in solution. In accordance with a second aspect of the present invention, the donor reservoir (26) of the 15 electrotransport delivery device (10) is comprised of silver and the donor reservoir (26) contains a predetermined "excess" loading of fentanyl/sufentanil halide to prevent silver ion migration with attendant skin discoloration. In accordance with a third aspect of the present invention, a transdermal electrotransport delivered dose of fentanyl/sufentanil is provided 20 which is sufficient to induce analgesia in (eg, adult) human patients suffering from moderate-to-severe pain associated with major surgical procedures.